

**BOARD OF SUPERVISORS
ACTION ITEM**

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SUBJECT: Transportation and Land Use Committee Report: Watershed Management Plan pilot project and assessment of potential funding sources to implement comprehensive watershed management

ELECTION DISTRICT: County-wide

CRITICAL ACTION DATE: At the pleasure of the Board

STAFF CONTACT: Glen Rubis, Department of Building & Development
Terrance Wharton, Department of Building & Development, Director

RECOMMENDATIONS:

Transportation and Land Use Committee: At its July 21, 2010 meeting, the Committee voted 3-1-1 (Delgaudio no; York absent) to forward to the Board of Supervisors a recommendation to allocate, if possible, \$300,000 in the FY12 budget to start a watershed management pilot project. The Committee further voted 4-1 (York absent) to recommend that the Board direct the WRTAC and County staff to investigate and prepare an assessment of potential funding options for watershed management planning and implementation.

Water Resources Technical Advisory Committee: Supports the recommendation of the Transportation and Land Use Committee.

Staff: Concurs with the recommendation of the Transportation and Land Use Committee.

BACKGROUND:

During the past decade, several programs and projects conducted by Loudoun County have contributed significantly to a better understanding of the county's water resources. These programs, along with the stormwater management program, have also provided a foundation from which the County can begin a systematic and detailed approach to watershed management planning and implementation that will help protect, and restore where possible, the county's surface water and groundwater resources. Watershed management is a well-established method for successfully managing water resources, including achieving water quality standards, and is the approach recommended by state and federal agencies.

The Board-appointed Water Resources Technical Advisory Committee (WRTAC) identified 12 recommendations from the 2008 Comprehensive Watershed Management Plan report¹ as priorities for the County to begin addressing as soon as possible and presented updates to the Transportation and Land Use Committee (TLUC) on several occasions regarding progress made by the WRTAC and County staff on these issues. At the July 21, 2010 TLUC meeting, recommendations were made by WRTAC that the Board of Supervisors provide funding in FY12 to initiate a pilot watershed management plan and direct WRTAC and staff to continue investigating and prepare an assessment of potential funding options for watershed management planning and implementation. There was discussion about what constitutes watershed management and how it differs from the current Board-initiated proposal of the Chesapeake Bay Preservation Act ordinance. As shown in Attachment A, the CBPA, or similar

ordinance, would be one component of many potential activities or “tools” that can be used in watershed management. The Committee voted 3-1-1 (Delgaudio no; York absent) to forward to the Board of Supervisors a recommendation to allocate, if possible, \$300,000 in the FY12 budget to start a watershed management pilot project. The Committee further voted 4-1 (York absent) to recommend that the Board direct the WRTAC and County staff to investigate and prepare an assessment of potential funding options for watershed management planning and implementation.

ISSUES:

Given the financial challenges the County is currently facing, establishing and funding a watershed management program will be difficult to accomplish. However, as a matter of the County’s long-term water resource policy, it is WRTAC’s opinion that not moving forward with watershed management planning at this time will cost Loudoun County more in the future if action is not taken now. Without significant intervention, watersheds and streams will continue to degrade and become more difficult and expensive to repair when the problems are eventually addressed due either to the County’s own actions or because of state or federal water quality mandates. Initiating action now will allow the County to methodically develop a process of addressing the issues of water resource protection and water quality improvement and thus be in a position to respond to problems or proactively avoid them more efficiently and effectively than would likely occur otherwise.

FISCAL IMPACT:

Based on the proposed initial work tasks, the fiscal impact would be an approximately \$300,000 enhancement to the FY12 budget, primarily for contracting a watershed planning consultant. While watershed management activities are part of the responsibilities of several staff within the Department of Building & Development and the County’s portion of tasks in the proposed recommendations can be absorbed with no additional staff resources. After completing the watershed planning phase, costs would be dominated by implementation tasks and although these costs are not known at this time, they will be estimated and included in the final report for the planning phase. Total long-term costs for county-wide watershed management will be in the millions of dollars. However, published studies and economic analyses have indicated that the resulting benefits offset the costs or even result in net savings to taxpayers in the long run²

ALTERNATIVES:

1. The Board may choose to approve one or neither of the recommendations from the TLUC.

DRAFT MOTIONS:

1. I move the approval of the recommendations of the Transportation and Land Use Committee that the Board of Supervisors recommend that the County Administrator include an enhancement of \$300,000 in the proposed FY 2012 Fiscal Plan for the watershed management pilot program.

I further move that the Water Resources Technical Advisory Committee (WRTAC) and County staff be directed to identify the physical location and assess the general extent of

the watershed pilot project, and present these findings to the Transportation and Land Use Committee by March 2011.

I further move that WRTAC and County staff be directed to continue researching alternative funding sources for long-term, on-going costs associated with the planning, implementation, and maintenance of a permanent watershed management program.

- OR -

2. I move an alternate motion.

ATTACHMENT:

Watershed Management - General Information and Examples

¹ The report *Comprehensive Watershed Management Plan, Loudoun County, Virginia, September 2008* was submitted by CH2M Hill, Inc. to Loudoun County in September 2008. The report was primarily funded by a U.S. EPA grant the Department of Building & Development obtained for the purpose of developing a plan for a county-wide watershed management program. (The report is available on the County's web site under the Department of Building & Development / Environmental Programs / Water and Hydrology / Watersheds / Comprehensive Watershed Management Plan.)

² A series of published studies on the economics of watershed management are included as Appendix IV of the Attachment to the July 21, 2010 TLUC Action Item #8.

Watershed Management

General Information and Examples

Prepared for the
Loudoun County Board of Supervisors
by
The Department of Building & Development
Engineering Division
9/21/2010

A Definition

Watershed management is the process of developing plans and implementing programs and projects to sustain and enhance watershed functions to meet the needs of biological communities and multiple stakeholder groups while conserving, protecting, and restoring habitats and the quality and quantity of waters within a watershed boundary.

Components of watershed management

1

PLAN

Select the watershed, identify & rank the problems, plan projects/solutions to achieve specified watershed goals

2

IMPLEMENT

Execute the plan through a series of projects and actions given the available budget

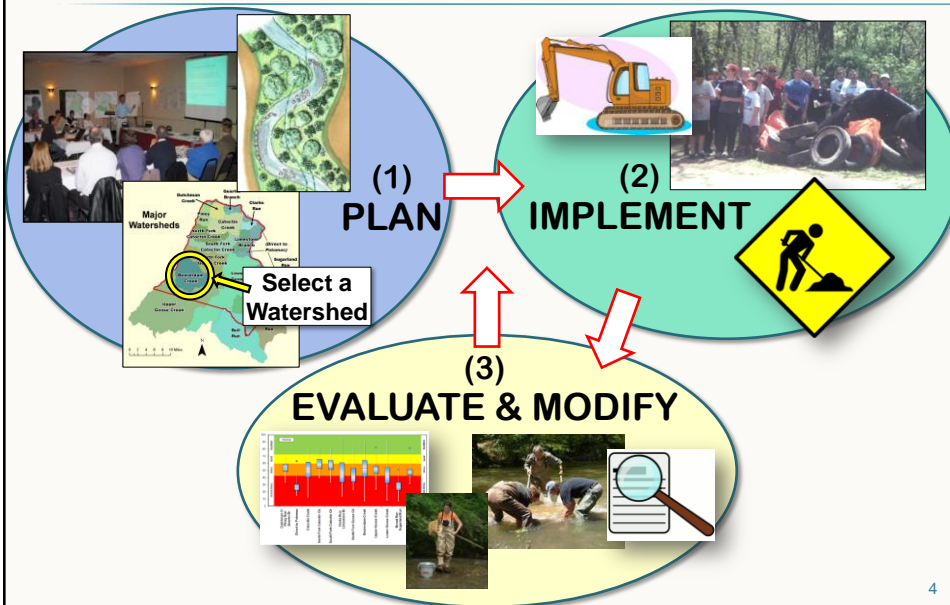
3

EVALUATE

Monitor results and adapt/modify the plan as needed to achieve the watershed goals

3

Watershed management - an adaptive process



4

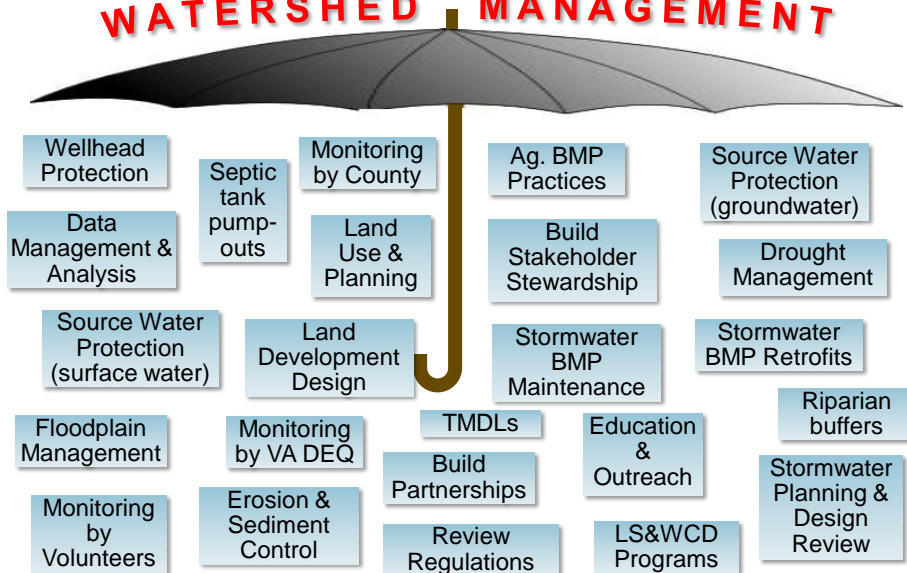
Example implementation projects

- ❖ Upgrade old stormwater ponds for better water quality and quantity
- ❖ Install rip-rap to stop erosion in drainage channel
- ❖ Plant trees along stream banks as a buffer
- ❖ Community outreach: educate, involve, build stewardship & partners
- ❖ Educate homeowners and businesses on lawn fertilizing
- ❖ Restore eroded stream channels
- ❖ Fence livestock out of streams, replace with watering system
- ❖ Sponsor community “clean-your-stream day” projects
- ❖ Encourage practices to reduce stormwater runoff and increase groundwater recharge
- ❖ Offer incentives to encourage robust conservation design plans
- ❖ Review effectiveness of County policies and ordinances, modify if needed

5

Integrating aspects of existing programs & new efforts to support watershed planning goals

WATERSHED MANAGEMENT



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